

Medical Statistics) and actual drug prices (Rote Liste, 2003) were used to calculate total costs of CSA treatment in Germany from the German payers perspective for the year 2003. (Discounts from the whole saler, pharmaceutical industry, retail pharmacies and patients copayments were taken into consideration). **RESULTS:** Total efficacy as stated by the physicians depends on CSEA and was seen between 53% and 76%. The total efficacy experienced by the physicians weighted with 2002 sales was 71%. Total sales in 2003 are €995.6 million. In total €1.4 billion must be invested for completely (100%) reaching the LDL-C goal of the European treatment guideline. **CONCLUSION:** Although it is stated by Klose and Schwabe (2003) that nearly €2.million of estimated €2.8 million patients could be treated sufficiently with CSEA the results of our study indicate that the investment for a sufficient treatment must be higher or the treatment itself must be improved by more efficient drugs.

#### PCV67

##### **AN ECONOMIC EVALUATION OF ALTEPLASE, RETEPLASE AND TENECTEPLASE IN TREATMENT OF ACUTE MI IN GREECE**

Maniadakis N<sup>1</sup>, Hatzikou M<sup>2</sup>, Kaitelidou D<sup>3</sup>, Spinthouri M<sup>4</sup>, Siskou O<sup>3</sup>, Fragoulakis B<sup>5</sup>, Liappis T<sup>6</sup>, Liaropoulos L<sup>4</sup>

<sup>1</sup>University of Patras, Patras, Greece, Greece; <sup>2</sup>Boehringer

Ingelheim, Athens, Greece; <sup>3</sup>University of Athens, Athens,

Greece, Greece; <sup>4</sup>University of Athens, Athens, Greece;

<sup>5</sup>University Hospital Patras, Patras, Greece, Greece;

<sup>6</sup>Boehringer Ingelheim, Athens, Greece

**OBJECTIVES:** To evaluate the total treatment cost and cost-effectiveness of three alternative treatments for patients with acute myocardial infarction from the perspective of the Greek NHS. **METHODS:** A systematic review of the literature was conducted to identify RCTs evaluating the treatments considered. Outcomes include all major health events associated with an AMI. Trial data we extracted and used to populate a decision analytic model. Data from long term studies were used to extrapolate 30-day and one-year data to end of lifetime. The model also accounts for patient risk group, in regards to age, sex, time-to- treatment, etc. The database of a large University Hospital was analyzed to estimate in-patient and outpatient costs associated with various groups of patients. Simulation was used to test the robustness of the results. **RESULTS:** Outcome data primarily come from GUSTO III and ASSENT 2 and their follow ups. For the average patient life time costs on alteplase, reteplase and tenecteplase were similar, at €24,205, €24,308, and €24,488 respectively. Average survival was 8.2221, 8.2110, and 8.2919 years respectively. Tenecteplase has marginally higher cost and outcomes. Alteplase and tenecteplase dominate the second arm and the incremental-cost-per-life-year-saved of tenecteplase over alteplase is about €4000, and for that reason it should be preferred on the basis of its very cost-effective ratio. These results are based the point estimates and in general terms they

also hold true when simulation is employed. **CONCLUSIONS:** The cost of the original treatment is only a minor component of the total life time treatment cost of AMI patients. The treatments evaluated here have similar survival and different health event profiles, but despite that they are characterized by similar total treatment costs, so that it is difficult to distinguish between them. If anything, tenecteplase is characterized by a marginally better cost-effectiveness ratio.

#### PCV68

##### **A SYSTEMATIC REVIEW OF COST-EFFECTIVENESS OF STATINS IN CARDIOVASCULAR RISK MANAGEMENT**

Franco O<sup>1</sup>, Bonneux L<sup>2</sup>

<sup>1</sup>Erasmus University, Rotterdam, Zuid-Holland, Netherlands;

<sup>2</sup>Julius Center for Patient Oriented Research, Utrecht Medical Center, Rotterdam, Zuid Holland, Netherlands

**OBJECTIVES:** Statin therapy reduces the rate of coronary heart disease (CHD), but high costs in combination with a large population eligible for treatment ask for prioritizing. One of the tools of priority setting is cost-effectiveness analysis (CEA). Even though all trials agree on the size of the benefit, CEA of statins report contradictory results. We reviewed CEA comparing statins with no pharmacological therapy and sought to synthesize cost effectiveness ratios (CER) for categories of risk of CHD and age. The level of heterogeneity among CER and its potential sources were evaluated. **METHODS:** Systematic review of the published statin CEA in Medline, the British National Health Service Economic Evaluation database and authors' reference lists. Outcomes were standardized by inflation and currency and stratified by risk and age. CER under US\$20,000 per life year saved were "cheap", over US\$40,000 were "expensive" and in between were "moderate". Sources of heterogeneity in the outcomes after stratification were analyzed using a regression model. **RESULTS:** Twenty-four studies were included, yielding 216 CER. The range of CER varied 10-fold (savings to \$489,394). Disagreement existed at levels of risk lower than 4%. After adjusting for risk in the regression model, the only significant variable was funding source. **CONCLUSIONS:** Statin therapy is cheap for high levels of risk, but discrepancies exist at lower levels. Scarce evidence exists for younger and older ages (<45, >65). Competing interests between pharmaceutical companies wanting to sell more and governments wanting to spend less may have strong impact on the results. Clear guidelines for CEA could reduce their vulnerability to bias and assure reproducibility.

#### PCV69

##### **THE COST-EFFECTIVENESS OF CYP2C9 GENOTYPING IN MANAGEMENT OF WARFARIN THERAPY—A DECISION TREE ANALYSIS**

You JH, Chan FW, Cheng G

The Chinese University of Hong Kong, Hong Kong, China